428 Heart 1998;**80**:428–429

Editorial

Heart failure clinics: a possible means of improving care

The number of patients with heart failure is increasing despite a general decline in the manifestations of ischaemic heart disease, the most important aetiologic factor today. The increasing prevalence is mainly because of the growing number of elderly heart failure patients who are often hospitalised and frequently readmitted owing to exacerbation; at least 30% are readmitted within one year and many within 30 days. Hospitalisation for heart failure is a major economic burden on health care.

Most heart failure patients are treated by primary care physicians. This requires special considerations in relation to the implementation of diagnostic and treatment guidelines issued by the European Society of Cardiology.³ The diagnosis and treatment of heart failure requires objective analysis of ventricular function, usually by echocardiography, which is not routinely used in primary care.^{4 5} Angiotensin converting enzyme (ACE) inhibitors are recommended as first line treatment for heart failure patients with reduced systolic function; however, this is difficult to achieve if cardiac function is not assessed. Consequently, patients with heart failure are not being managed in accordance with evidence-based medicine. Neither diagnosis nor treatment is optimal—how can this situation be improved?

The concept of heart failure clinics

Heart failure clinics are staffed by physicians and nurses with special expertise who exclusively manage patients with heart failure, which may significantly improve outcomes.^{6 7} The clinics are easily accessible, integrated units providing inpatient beds, daycare facilities, outpatient clinics, and diagnostic and monitoring facilities. The aims of these clinics are not only to provide optimal care for hospitalised patients but also to take the initiative in securing adequate medical, social, and psychological support following discharge. This requires that diagnosis, treatment, and follow up are based on a "shared care programme".

Shared care programmes

Heart failure patients need continuous, long term support outside the hospital environment; therefore, it is mandatory that a system is designed in which patients can be offered optimal care after discharge. This requires a multidisciplinary approach. A shared care programme is created by those involved in the care of these patients, usually cardiologists, internists, primary care physicians, and geriatricians. A consensus should be reached regarding the distribution of responsibilities, patient referral routines, guidelines for the use of diagnostic and therapeutic principles, as well as a built in quality control system. Education of patients, relatives, and health care staff should be defined guidelines for optimisation of both nonpharmacological and pharmacological treatment should be specified. One important aim of the shared care programme is to offer continuity with optimal patient support at all levels. The long term goal of this strategy is not only to improve quality of life for patients but also to reduce the burden on the health care system, mainly by reducing the requirement for hospital admissions. A multidisciplinary approach has been shown to be efficacious in the management of heart failure patients.8

A new role for nurses

A new and more diverse role for nurses is an important component of heart failure clinics. This is achieved by offering tailored education and training as well as arranging formal examinations before they are considered competent to make independent decisions. Physician supervised, nurse mediated implementation of pharmacological guidelines has been found safe and efficacious. Delegation of the right to adjust treatment with specific drugs—for example, diuretics, ACE inhibitors, and β blockers, as well as the opportunity to examine patients and order relevant blood tests is feasible. Individual treatment and follow up plans should be documented in the nurses' patient records, ideally a computerised system for instant access. The nurses should also be responsible for establishing a support network for each patient, which may include physiotherapists, social services, and medical staff outside hospital. Engaging nurses in homed based intervention has proved to be effective in reducing multiple readmissions and outof-hospital deaths.10

A specific task for the heart failure nurse is to educate patients on the importance of recognising the signs and symptoms of heart failure and to discuss individual lifestyle changes and risk factors. Patients should be taught to check for the signs and symptoms indicating worsening heart failure. The nurse plays a pivotal role in this respect, particularly if he or she is easily accessible for consultation by telephone. Information about the impact of heart failure on social activities as well as the importance of vaccination, contraception, and hormone substitution are other important areas in which nurses could play a role. Finally, nurses can assume responsibility for the implementation of non-pharmacological treatment, which is often forgotten despite having a great impact on heart failure outcomes.¹¹

Focus on the patient

Patients with heart failure are chronically ill and will, with time, experience a worsening course. The condition leads to reduced quality of life and often a state of anxiety. Focusing on patient needs is of utmost importance. Consequently, the use of self care principles should be employed, ¹² and information for patients and relatives should receive priority. In addition, patient diaries containing data such as weight and suitable diuretic adjustments have been shown to be useful. Symptoms indicating worsening of heart failure like dyspnoea, orthopnoea, and nocturnal diuresis are easily observed. Regular control of body weight and ankle measurements are useful, and self adjustment of diuretic dose after proper information has been shown to be possible. The patients' responsibilities of the their condition should be discussed and defined individually.

Key to success

Units for the care of patients with specific medical problems have been evaluated in other specialities. Clinics for diabetic care and asthma have proved very useful. In contrast to these conditions, heart failure mainly affects the elderly and the prognosis is sinister. Therefore, specific requirements have to be met for a clinic to be successful. The goal for a heart failure clinic must be to provide the highest quality of care possible. This does not mean that

Editorial 429

patients should be hospitalised frequently but should be offered the optimal level of care required at any particular moment according to the shared care programme principle. The staff running the heart failure clinic must be willing to provide service at all times and team work is a necessity. Constant review of the unit's performance is important as well as continuous competency development among the staff. Concentration of one condition to a specific clinic may seem simple but experience has taught us that it is difficult to maintain enthusiasm over long periods of time. Built in systems for quality assurance should therefore be encouraged to provide continuous feedback on the unit's performance.

This is particularly important as increased health care access, such as provided by a heart failure clinic, has the potential to be counterproductive. This was clearly shown in a Veterans Administration study in which close follow up after discharge in chronically ill patients by a nurse–physician team increased rather than decreased the rate of hospitalisation.¹³

The future

Initial reports from heart failure clinics look very promising. ¹⁴ There are, however, many obstacles to overcome before these units can be considered an integral part of heart failure care. We need scientific evidence that heart failure clinics will in fact reduce hospital admissions and improve quality of life for patients.

The key issue for success of heart failure clinics is to stimulate the participation of physicians and nurses in shared care programmes. Unless all parties are informed and involved in the care of patients, the concept will be less successful. We believe that heart failure clinics have come to stay and that the future development will prove that they offer what they promise—improved care.

LEIF ERHARDT CHARLES CLINE

Department of Cardiology, Malmö University Hospital, Malmö, Sweden.

- 1 Cowie MR, Mosterd A, Wood DA, et al. The epidemiology of heart failure. Eur Heart § 1997;18:208–23.
- 2 Cline C, Broms K, Willenheimer R, et al. Hospitalization and health care costs due to congestive heart failure in the elderly. American Journal of Geriatric Cardiology 1996;5:10–23.
- 3 The Task Force on Heart Failure of the European Society of Cardiology. Guidelines for the diagnosis of heart failure. Eur Heart J 1995;16:741–51.
- 4 The Task Force of the Working Group on Heart Failure of the European Society of Cardiology. The treatment of heart failure. Eur Heart J 1997;18: 736–53.
- 5 Edep ME, Shah NB, Tateo IM, et al. Differences between primary care physicians and cardiologists in management of congestive heart failure: relation to practice guidelines. J Am Coll Cardiol 1997;30:518–26.
- 6 Hanumanthu S, Butler J, Chomsky D, et al. Effect of a heart failure program on hospitalisation frequency and exercise tolerance. Circulation 1997;96: 2842-8.
- 7 Smith LE, Fabbri SA, Pai R, et al. Symtomatic improvement and reduced hospitalization for patients attending a cardiomyopathy clinic. Clin Cardiol 1997;20:949–54.
- 8 Rich MW, Beckham V, Wittenberg C, et al. A multidisciplinary intervention to prevent the readmission of elderly patients with congestive heart failure. N Engl Med J 1995;333:1190-5.
- 9 West JA, Miller NH, Parker KM, et al. A comprehensive management system for heart failure improves clinical outcomes and reduces medical resource utilization. Am J Cardiol 1997;79:58–63.
- 10 Stewart S, Pearson S, Luke CG, et al. Effects of a home-based intervention on unplanned radmissions and out-of-hospital deaths. J Am Geriatr Soc 1998;46:1–7.
- 11 Kostis JB, Rosen RC, Cosgrove NM, et al. Nonpharmacologic therapy improves functional and emotional status in congestive heart failure. Chest 1994;106:996–1001.
- 12 Von Korff M, Gtuman J, Schaefer J, et al. Collaborative management in chronic illness. Ann Intern Med 1997;127:1097–102.
 13 Weinberger M, Oddone EZ, Henderson WG, for the Veteran Affairs Coop-
- 13 Weinberger M, Oddone EZ, Henderson WG, for the Veteran Affairs Cooperative Study Group on Primary Care and Hospital Readmission. Does increased acces to primary care reduce hospital readmissions? N Engl J Med 1996;334:1441-7.
- 14 Cline CMJ, Israelsson BYA, Willenheimer RB, et al. A cost effective management programme for heart failure reduces hospitalisation. Heart 1998;80:442-6.